

AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A hydronic heating system, comprising:
a combustion chamber enclosure having a plurality of panels defining a combustion chamber for the combustion of fuel to generate heat; and
a conduit substantially embedded in at least one of the plurality of panels, the conduit configured to carry a heat conductive liquid,
wherein the at least one panel has insulating properties such that the panel is configured to absorb heat from a heat source and transfer the absorbed heat to the liquid in the conduit while resisting formation of condensation on the panel.
2. (Original) The system of claim 1, wherein the at least one panel is formed from a material that is configured to resist formation of condensation on a primary surface of the panel.
3. (Original) The system of claim 1, wherein an outer surface along a portion of the conduit length is encapsulated with a material that is configured to resist formation of condensation.
4. (Currently Amended) The system of claim 1, wherein the panel is formed from a high temperature material using at least one of a vacuum molding, a compression molding, or and a casting process.
5. (Cancelled)
6. (Currently Amended) The system of claim 1, further comprising a heat exchanger that configured to removes heat from the liquid in the conduit at a location remote from the combustion chamber enclosure.

7. (Original) The system of claim 6, wherein a portion of the conduit extends through the heat exchanger.

8. (Original) The system of claim 1, further comprising a pump configured to move the liquid in the conduit.

9. (Currently Amended) The system of claim 51, wherein the at least one panel of the combustion chamber enclosure in which the conduit is embedded is molded about ~~includes a molded material, and the system panel and the portion of the conduit such that the panel and the conduit~~ are integrally formed into a panel of the combustion chamber enclosure.

10. (Currently Amended) The system of claim 1, wherein the ~~system is adapted and configured for removable engagement with a heat generating device that is configured as a~~ heat source is adapted to be removable from the system.

11. (Currently Amended) The system of claim 41, wherein the ~~high temperature material is at least one panel is formed of~~ a moldable material that includes a ceramic fiber and a binder.

12. (Currently Amended) The system of claim 51, wherein a portion of the liquid-carrying conduit is integrally formed together with at least two or more ~~one or more~~ panels of the combustion chamber enclosure.

13. (Currently Amended) The system of claim 51, wherein the combustion chamber enclosure is part of a fireplace.

14. (Currently Amended) A hydronic heating system for a fireplace, the system comprising:

a liquid-filled conduit adapted to carry a liquid; and

a combustion chamber enclosure having a plurality of panels defining a combustion

chamber for the combustion of fuel to generate heat, the panels having insulative properties and being integrally formed from a ceramic moldable material using a molding process and configured to resist formation of condensation on the panels, the liquid-filled-conduit being substantially embedded within at least one of the panels.

15. (Currently Amended) The system of claim 14, wherein the panels are formed using a molding process that includes at least one of a compression molding process or and a vacuum molding process.

16. (Original) The system of claim 14, wherein the moldable material includes a ceramic fiber and a binder.

17. (Cancelled)

18. (Original) The system of claim 14, wherein the panels of the combustion chamber enclosure are integrally formed as a single piece.

19. (Currently Amended) A method of manufacturing a hydronic heating system that includes a panel and a liquid-filled conduit, the method comprising the steps of:

forming a panel from a moldable material having insulative properties and including a ceramic fiber and a binder, the panel being adapted to resist formation of condensation on an outer surface of the panel;

encapsulating a conduit in the panel such that the panel is adapted to absorb and conductively transfer heat to a liquid in the conduit;

forming a combustion chamber-enclosure; and

attaching the panel adjacent to a surface of the combustion chamber-enclosure to transfer heat from the combustion chamber to the liquid-filled conduit.

20. (Currently Amended) The method of claim 19, wherein the panel is formed using

at least one of a vacuum molding, a compression molding, ~~or and~~ a casting process.

21. (Currently Amended) The method of claim 19, wherein forming the panel includes forming the panel as ~~panel part~~ of a combustion chamber enclosure, the combustion chamber enclosure defining a the combustion chamber ~~for the combustion of fuel to generate heat~~.

22. (Currently Amended) The method of claim 21, further comprising encapsulating a second portion of the conduit in ~~a the~~ moldable material ~~configured to resist formation of condensation on an outer surface of the moldable material~~.

23. (Cancelled)

24. (Currently Amended) The method of claim 21, wherein the encapsulating step includes encapsulating the first portion of the conduit in at least two ~~or more~~ panels of the combustion chamber enclosure.

25. (Original) The method of claim 21, wherein the panels of the combustion chamber enclosure are integrally formed as a single piece.

26. (Currently Amended) The method of claim 19, further comprising mounting the ~~system panel~~ to at least one of an outer surface ~~or and~~ an inner surface of a heat generating device.

27. (Currently Amended) A hydronic heating system for a fireplace, the system comprising:

a combustion chamber enclosure having a plurality of panels defining a combustion chamber for the combustion of fuel to generate heat; and

a heat exchanger, including:

a molded panel of insulative material including a ceramic fiber and a binder;
and
a liquid-filled conduit embedded within the molded panel;
wherein the molded panel is coupled to the combustion chamber enclosure.

28. (Original) The system of claim 27, further comprising an outer enclosure configured to enclose the combustion chamber enclosure and being spaced apart from the combustion chamber enclosure to define a plenum there between, wherein the heat exchanger is positioned adjacent to the outer enclosure.

29. (Original) The system of claim 28, wherein the heat exchanger is coupled to an outer surface of the outer enclosure.

30. (Original) The system of claim 28, wherein the heat exchanger is positioned within the plenum.

31. (Currently Amended) The system of claim 27, wherein the molded panel extends along at least two ~~or more~~ panels of the combustion chamber enclosure.

32. (Original) The system of claim 27, wherein the molded panel is positioned adjacent to a panel of the combustion chamber enclosure within the combustion chamber.

33. (Original) The system of claim 27, wherein the molded panel defines at least one panel of the combustion chamber enclosure.

34. (Cancelled)

35. (Original) The system of claim 27, wherein the liquid-filled conduit is defined by a pipe member, wherein a portion of the pipe member is molded into the molded panel.